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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,648	12/10/2001	Noriyoshi Shida	Q67621	2208

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Washington, DC 20037-3202

EXAMINER

JOLLEY, KIRSTEN

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,648

Applicant(s)

SHIDA ET AL.

Examiner

Kirsten C Jolley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 6-14, 16-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5/9/03.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-5 and 15, drawn to a film forming apparatus wherein film forming liquid is supplied to contact an outer periphery of a film forming jig, classified in class 118, subclass 52.
 - II. Claim 6, drawn to a film forming method comprising supplying the film forming liquid to be in contact with a film forming jig, classified in class 427, subclass 240.
 - III. Claims 7-14, drawn to a film forming apparatus comprising supplying film forming liquid onto the substrate, classified in class 118, subclass 52.
 - IV. Claims 16-22, drawn to a film forming method comprising supplying a film forming liquid onto a substrate, classified in class 427, subclass 240.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another materially different process, for example the apparatus can be used to apply an etchant solution or a cleaning solution.

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3. Inventions IV and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another materially different process, for example the apparatus can be used to apply an etchant solution or a cleaning solution.

4. Inventions I and II are unrelated to Inventions III and IV. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, Inventions I and II use a film forming jig and supply film forming liquid in contact with an outer periphery of the film forming jig (illustrated in Figures 1-10B). Inventions III and IV are directed to film forming units whereby a film forming liquid is supplied onto the substrate, not on a jig, while rotating the substrate (illustrated in Figures 13-18).

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Darryl Mexic/Tracy Johnson on September 25, 2003 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-5. After the election was made, the Examiner noticed that claim 15 should have been grouped with Group I instead of Group III (as stated over the telephone). Since this change only added a claim to Applicant's elected group and did not remove any claims, the Examiner did not re-telephone Applicant and merely added claim 15 to the elected group. Affirmation of this

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election must be made by applicant in replying to this Office action. Claims 6-14 and 16-22 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Plows et al. (US 4,075,974).

Plows et al. discloses a film forming apparatus comprising a rotating unit (spindle 7) for rotating a substrate (disk 15), and a film forming jig (distributor 31) which is placed on the disk substrate, whereby film forming liquid is applied to an outer periphery of the film forming jig

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and the rotation unit is rotated to form a film (col. 3, lines 21-32 and 50-66). As to claims 2 and 4, the substantially conical jig/distributor 31 illustrated in Figure 1 has a thickness larger than that of the film formed. As to claim 5, Plows et al. teaches that the jig/distributor may also have a frusto conical face, or a substantially truncated conical shape as illustrated in Figure 2 (col. 3, lines 29-32).

10. Claims 1-2, 4-5, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 11-195250 A.

A JPO computer translation of JP 11-195250 A is attached.

JP '250 discloses a film forming apparatus comprising a rotating unit for rotating a substrate 3, and a film forming jig 2 which is placed on the substrate, whereby liquid is applied to an outer periphery of the film forming jig as illustrated in Figure 3 and the rotation unit is rotated to form a film. As to claim 2, Figure 3 also illustrates that a thickness of the film forming jig 2 is larger than that of the film 1. As to claim 4, Figure 8 illustrates a film forming jig 10 having a "substantially conical" shape. As to claim 5, Figure 6 illustrates a film forming jig 10 having a substantially truncated conical shape. As to claim 15, the substrate is an optical disc substrate.

11. Claims 1-3, 5, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 10-289489 A.

A JPO computer translation and Derwent and JPO abstracts of JP 10-289489 A are attached.

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As to claims 1, 3, and 15, in a first embodiment illustrated in Figures 4-6, JP '489 discloses a film forming apparatus comprising a rotating unit for rotating a substrate, and a cylindrical film forming jig 21 which is placed on the substrate, whereby film forming liquid is applied to an outer periphery of the film forming jig 21 and the rotation unit is rotated to form a film. JP '489 is directed to coating optical disc substrates.

As to claims 1-2, 5, and 15, in another embodiment illustrated in Figure 19, JP '489 discloses a film forming apparatus comprising a rotating unit for rotating the substrate and a truncated conical shaped jig 121 that has a thickness larger than the coating film, whereby the rotation unit is rotated to form a film. JP '489 is directed to coating optical disc substrates.

12. Claims 1-2, 4-5, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Komaki et al. (US 2001/0052320).

Komaki et al. discloses a film forming apparatus comprising a rotating unit for rotating a substrate (illustrated in Figures 1-3), and a film forming jig 31 which is placed on the substrate, whereby liquid is applied to an outer periphery of the film forming jig as illustrated in Figure 3 and the rotation unit is rotated to form a film. As to claim 2, a thickness of the film forming jig 31 is larger than that of the film 1. As to claim 4, Figure 7C illustrates a film forming jig 31 having a "substantially conical" shape. As to claim 5, Figures 1 and 7A illustrate a film forming jig 10 having a "substantially truncated conical" shape. As to claim 15, the substrate of Komaki et al. is an optical disc substrate.

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13. Claims 1-3 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kikuchi (US 5,980,985).

Kikuchi '985 discloses a film forming apparatus comprising a rotating unit 7 for rotating a substrate, and a film forming jig 8 which is placed on the substrate, whereby liquid is applied to an outer periphery of the film forming jig as illustrated in Figure 6 and the rotation unit is rotated to form a film. As to claim 2, it is noted that at the axial portion of the jig 8, the jig has a thickness larger than that of the coating film. As to claim 3, Figure 8 illustrates film forming jig 8 having a "substantially cylindrical" shape. As to claim 15, the substrate of Kikuchi '985 is an optical disc substrate.

14. Claims 1-2, 4-5, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kikuchi (US 6,077,349).

Kikuchi '349 discloses a film forming apparatus comprising a rotating unit 9 for rotating a substrate, and a film forming jig 10 which is placed on the substrate, whereby liquid is applied to an outer periphery of the film forming jig as illustrated in Figure 6 and the rotation unit is rotated to form a film. As to claim 2, it is noted that at the axial portion of the jig 10, the jig has a thickness larger than that of the coating film. As to claims 4-5, Figure 7 illustrates film forming jig 10 having a "substantially conical" or "substantially truncated conical" shape. As to claim 15, the substrate of Kikuchi '349 is an optical disc substrate.

Conclusion

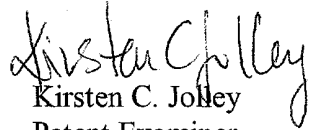
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15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Decre (US 2001/0018093) is cited to illustrate a film forming unit having a substantially cylindrical jig.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C Jolley whose telephone number is 703-306-5461. The examiner can normally be reached on Monday to Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 703-308-2333. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1193.


Kirsten C. Jolley
Patent Examiner
Technology Center 1700

kcj